



```

RRRRRRRR      EEEEEEEEEEE      OOOOOO
RRRRRRRR      EEEEEEEEEEE      OOOOOO
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RRRRRRRR      EEEEEEEEEEE      QQ              QQ
RRRRRRRR      EEEEEEEEEEE      QQ              QQ
RR      RR      EE              QQ              QQ
RR      RR      EE              QQ      QQ      QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EE              QQ              QQ
RR              EEEEEEEEEEE      QQ      QQ      QQ
RR              EEEEEEEEEEE      QQ      QQ      QQ

```

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Version 'V03-000'

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MODULE: CRFMAC.REQ

FACILITY: CROSS REFERENCE UTILITY INTERFACE

ABSTRACT: REQUIRE FILE WHICH DEFINES THE CRF INTERFACING MACROS  
I.E. THOSE WHICH INITIALIZE THE FORMAT DESCRIPTION TABLES

HISTORY:

VERSION: 'V04-000'

AUTHOR: T.J. PORTER 24-MAY-77

MODIFICATIONS:

NO.	DATE	PROGRAMMER	PURPOSE
001	24-JUN-77	T.J. PORTER	CROSS REFERENCE KEY TYPES IN MACROS.
002	11-JUL-77	T.J. PORTER	ADD ERROR AND OUTPUT ROUTINE ADDRESSES TO CONTROL TABLE. INITIALIZE ENTRY AND NODE SIZES IN TABLE.
003	29-OCT-79	B.L. SCHREIBER	KEY TYPES ARE NOW EXTERNAL. DEFINE ALL LITERALS SO IT CAN GO INTO SYSTEM LIBRARIES.

| 004 11-DEC-79

B.L. SCHREIBER EXPAND CONTROL TABLE

| --



++  
FUNCTIONAL DESCRIPTION:

THIS REQUIRE FILE DEFINES THE BLISS MACROS TO BE USED BY A UTILITY WHICH USES THE CROSS REFERENCE UTILITY. THESE KEYWORD MACROS ARE THOSE FOR INITIALIZING THE TABLES REQUIRED BY CROSS REFERENCE FOR DESCRIPTION OF THE OUTPUT LINE FORMATS.

--  
DECLARE TABLE AND ENTRY SIZES \*\*NOTE\*\* MUST CHANGE IF CRF CHANGES \*\*\*

## LITERAL

CRFSK\_TBLSIZE = 96,  
CRFSK\_FIELDSIZE = 12,

! SIZE OF LINE TABLE (BYTES)  
! FIELD TABLE ENTRY SIZE (BYTES)

CRFSK\_ASCIC = 0,  
CRFSK\_BIN\_U32 = 1,

! ASCII COUNTED STRING KEYS  
! 32 BIT UNSIGNED BINARY KEYS

CRFSK\_VALUES = 0,  
CRFSK\_VALS\_REFS = 1,  
CRFSK\_DEFS\_REFS = 2,  
CRFSK\_DELETE = 0,  
CRFSK\_SAVE = 1,  
CRFSK\_REF = 0,  
CRFSK\_DEF = 1;

! CROSS REFERENCE WITH VALUES  
! JUST REFERENCES  
! FULL CROSS REFERENCE  
! INDICATOR TO DELETE THE TABLES  
! INDICATOR TO SAVE THE TABLES  
! REFERENCE TO A SYMBOL  
! DEFINITION OF SYMBOL

GENERATE THE CROSS REFERENCE CONTROL TABLE

## KEYWORDMACRO

\$CRFCTLTABLE(KEYTYPE=ASCIC,ERROR=0,OUTPUT=0,  
MEMEXP=50,  
KEY1TABLE=0, KEY2TABLE=0,  
VAL1TABLE=0, VAL2TABLE=0,  
REF1TABLE=0, REF2TABLE=0)=  
BLOCK[CRFSK\_TBLSIZE,BYTE] ALIGN(0)  
INITIAL(0,

LONG(0),

BYTE(\$NAME('CRFSK\_',KEYTYPE), ! TYPE OF KEY

0,0,0),

THREE BYTES RESERVED

LONG(0)

NUMBER OF ENTRIES IN CROSS REFERENCE

LONG(0,0),

LIST HEAD FOR VIRTUAL MEMORY ALLOCATED

LONG(MEMEXP\*512),

SIZE IN BYTES OF VA TO ALLOCATE

LONG(MEMEXP),

SIZE IN PAGES OF VA TO ALLOCATE

LONG(0,0,0,0,0,0,0,0),

! RESERVED FOR EXPANSION

ERROR,

ERROR ROUTINE ADDRESS

OUTPUT,

OUTPUT ROUTINE ADDRESS

KEY1TABLE,

POINTER TO PRIMARY KEY FIELD DESCRIPTION TABLE

KEY2TABLE,

POINTER TO SECOND KEY FIELD DESCRIPTION TABLE

VAL1TABLE,

POINTER TO TABLE DESCRIBING

VAL2TABLE,

THE KEY VALUE FIELD

POINTER TO SECONDARY

VALUE FIELD DESCRIPTION TABLE

```
REF1TABLE,      | POINTER TO PRIMARY  
REF2TABLE)%,    | REFERENCE FIELD DESCRIPTION TABLE  
                | POINTER TO SECONDARY REFERENCE  
                | FIELD DESCRIPTION TABLE
```

```
! GENERATE AN ENTRY IN A TABLE DESCRIBING FORMATS OF A PARTICULAR  
! FIELD OF THE LINE  
!
```

```
SCRFFIELD(BIT_MASK=0,FAO_STRING,SET_CLEAR=1,FIELD_WIDTH)=  
BLOCK[CRFSK_FIELDSIZE,BYTE]  
  INITIAL(WORD(BIT_MASK OR 'X'8000'),    | BIT PATTERN FOR MATCH  
    BYTE(SET_CLEAR),                     | MATCH ON SET OR CLEAR  
    BYTE(FIELD_WIDTH),                   | WIDTH OF FIELD  
    LONG(%CHARCOUNT(FAO_STRING)),      | LENGTH OF FAO STRING  
    LONG(UPLIT(FAO_STRING)))%,          | ADDRESS OF TEXT STRING
```

```
! GENERATE A FIELD TABLE END INDICATOR  
!
```

```
SCRFFIELDEND = WORD INITIAL(0)%;
```



0068 AH-BT13A-SE  
VAX/VMS V4.0

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